

## **APPENDIX I**

The database 310 provides the information necessary for responding to queries such as from an SLA reporter 502, illustrated in Fig. 4. The SLA Reporter 206 is a process which generates reports. The reporter initially accesses administratively defined SLA parameters or profiles 802. The reporter assembles queries 804 to get actual SLA parameters/measurements from the database. A connection 806 is made to the database. If successful 808, queries are run and the report is generated 812. The report is formatted and delivered 414 in accordance with user-specified options 816. The SLA Reporter will contain queries that will contrast the agreed SLA parameters against the actual measured service level. SLA metrics are provided per virtual site, URL, transaction, content type, file type, source IP, and user class. Within a virtual site, definitions for classes are also created. Each class implies certain agreed-to SLA metrics. For example, a "gold" class may be defined to require higher performance than a "silver" class. A hosted site is defined with [nor] no more than one class. Similarly, a User is defined with no more than one class. An operator defines the acceptance parameters of a class by entering the class name, and assigning servers to service that class. Servers may also be re-assigned by other web-farm entities as performance needs indicate. In addition, a class is defined by way of its subscribed error rate, response time, and bandwidth parameters. As an added feature, if a configuration operator attempts to delete a class definition from the database, the system will first check to see if the class is defined for any host, and will prevent deletion of assigned classes.